

SONY[®]

4-460-572-11(2)

Digital Still Camera

Instruction Manual

Cyber-shot



LITHIUM ION



AVCHD
Progressive

HDMI[™]
REGISTERED TRADEMARK OF HALLING ELECTRONICS

DSC-HX50/HX50V

Learning more about the camera (“Cyber-shot User Guide”)



“Cyber-shot User Guide” is an on-line manual. Refer to it for in-depth instructions on the many functions of the camera.

- ① Access the Sony support page.
<http://www.sony.net/SonyInfo/Support/>
- ② Select your country or region.
- ③ Search for the model name of your camera within the support page.
 - Check the model name on the bottom of your camera.

Checking the supplied items

The number in parentheses indicates the number of pieces.

- Camera (1)
- Rechargeable battery pack NP-BX1 (1)
- Micro USB cable (1)
- AC Adaptor AC-UB10/UB10B/UB10C/UB10D (1)
- Power cord (mains lead) (not supplied in the USA and Canada) (1)
- Wrist strap (1)
- Shoe cap (1) (Attached on the camera)
- Instruction Manual (this manual) (1)

Owner's Record

The model and serial numbers are located on the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. DSC-HX50/DSC-HX50V

Serial No. _____

Model No. AC-UB10/AC-UB10B/AC-UB10C/AC-UB10D

Serial No. _____

WARNING

To reduce fire or shock hazard, do not expose the unit to rain or moisture.

IMPORTANT SAFETY INSTRUCTIONS -SAVE THESE INSTRUCTIONS DANGER TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.

CAUTION

| Battery pack

If the battery pack is mishandled, the battery pack can burst, cause a fire or even chemical burns. Observe the following cautions.

- Do not disassemble.
- Do not crush and do not expose the battery pack to any shock or force such as hammering, dropping or stepping on it.
- Do not short circuit and do not allow metal objects to come into contact with the battery terminals.
- Do not expose to high temperature above 60°C (140°F) such as in direct sunlight or in a car parked in the sun.
- Do not incinerate or dispose of in fire.
- Do not handle damaged or leaking lithium ion batteries.

- Be sure to charge the battery pack using a genuine Sony battery charger or a device that can charge the battery pack.
- Keep the battery pack out of the reach of small children.
- Keep the battery pack dry.
- Replace only with the same or equivalent type recommended by Sony.
- Dispose of used battery packs promptly as described in the instructions.

AC Adaptor

Use the nearby wall outlet (wall socket) when using the AC Adaptor. Disconnect the AC Adaptor from the wall outlet (wall socket) immediately if any malfunction occurs while using the apparatus.

For Customers in the U.S.A. and Canada

RECYCLING LITHIUM-ION BATTERIES

Lithium-Ion batteries are recyclable.

You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.

For more information regarding recycling of rechargeable batteries, call toll free

1-800-822-8837, or visit <http://www.rbrc.org/>



Caution: Do not handle damaged or leaking Lithium-Ion batteries.

Battery pack

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

For Customers in the U.S.A.

UL is an internationally recognized safety organization.
The UL Mark on the product means it has been UL Listed.

If you have any questions about this product, you may call:

Sony Customer Information Center
1-800-222-SONY (7669).

The number below is for the FCC related matters only.

Regulatory Information

Declaration of Conformity

Trade Name: SONY
Model No.: DSC-HX50V
Responsible Party: Sony Electronics Inc.
Address: 16530 Via Esprillo,
San Diego, CA 92127 U.S.A.
Telephone No.: 858-942-2230

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The supplied interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

For Customers in Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

For Customers in Europe



Hereby, Sony Corporation, declares that this DSC-HX50/HX50V Digital Still Camera is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC. For details, please access the following URL:

<http://www.compliance.sony.de/>

Notice for the customers in the countries applying EU Directives

This product has been manufactured by or on behalf of Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. Inquiries related to product compliance based on European Union legislation shall be addressed to the authorized representative, Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters, please refer to the addresses provided in the separate service or guarantee documents.

This product has been tested and found compliant with the limits set out in the EMC regulation for using connection cables shorter than 3 meters (9.8 feet).

Attention

The electromagnetic fields at the specific frequencies may influence the picture and sound of this unit.

Notice

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information

about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)



This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent

potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

For all other batteries, please view the section on how to remove the battery from the product safely.

Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notice for customers in the United Kingdom

A moulded plug complying with BS 1363 is fitted to this equipment for your safety and convenience.

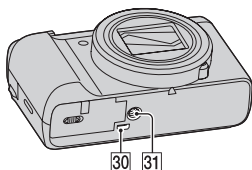
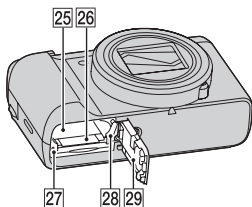
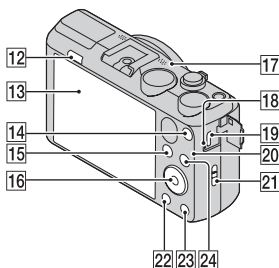
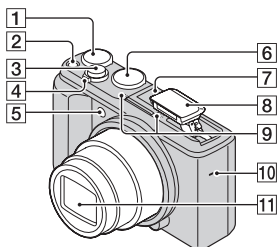
Should the fuse in the plug supplied need to be replaced, a fuse of the same rating as the supplied one and approved by ASTA or BSI to BS 1362, (i.e., marked with an  or  mark) must be used.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.

For Customers in Singapore

Complies with
IDA Standards
DB00353

Identifying parts



- 1** Exposure compensation dial
- 2** ON/OFF (Power) button
- 3** Shutter button
- 4** For shooting: W/T (zoom) lever
For viewing: **Q** (Playback zoom) lever/**Index** lever
- 5** Self-timer lamp/Smile Shutter lamp/AF illuminator
- 6** Mode dial:
iA (Intelligent Auto)/
iA+ (Superior Auto)/
P (Program Auto)/
A (Aperture Priority Shooting)/
S (Shutter Speed Priority Shooting)/
M (Manual Exposure Shooting)/
MR (Memory recall mode)/
iS (iSweep Panorama)/
Movie (Movie Mode)/
SCN (Scene Selection)
- 7** Multi interface shoe ^{*1}
- 8** Flash
- 9** Microphone
- 10** Speaker
- 11** Lens
- 12** (Flash pop-up) button
- 13** LCD screen
- 14** MOVIE (Movie) button
- 15** (Playback) button
- 16** Control wheel
- 17** GPS receiver (built-in, DSC-HX50V only)
- 18** Charge lamp
- 19** Multi/Micro USB Terminal ^{*2}
- 20** Wi-Fi receiver (built-in)
- 21** Hook for wrist strap
- 22** MENU button

- 23** ?/⏏ (In-Camera Guide/Delete) button
- 24** CUSTOM (Custom) button
- You can assign a desired function to the CUSTOM button. The default setting is set to [ISO].
- 25** Battery insertion slot
- 26** Memory card slot
- 27** Access lamp
- 28** Battery eject lever
- 29** Battery/Memory card cover
- 30** HDMI micro jack
- 31** Tripod receptacle
- Use a tripod with a screw less than 5.5 mm (7/32 inches) long. Otherwise, you cannot firmly secure the camera, and damage to the camera may occur.

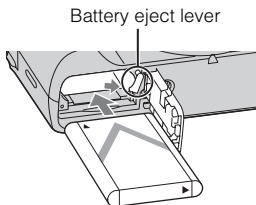
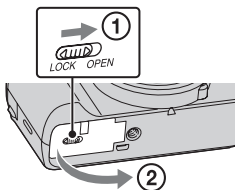
*1 For details on compatible accessories for the multi interface shoe, visit the Sony web site, or consult your Sony dealer or local authorized Sony service facility. You can also use accessories that are compatible with the accessory shoe. Operations with other manufacturers' accessories are not guaranteed.

ni Multi
Interface Shoe

Accessory Shoe

*2 Supports Micro USB compatible device.

Inserting the battery pack



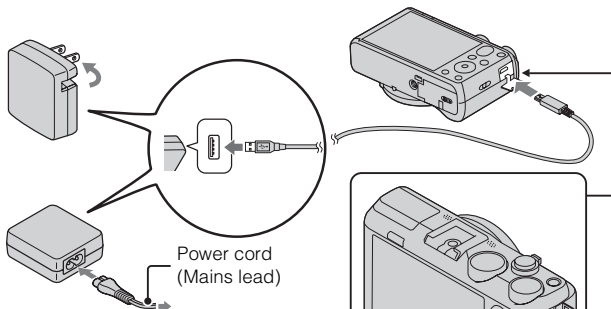
1 Open the cover.

2 Insert the battery pack.

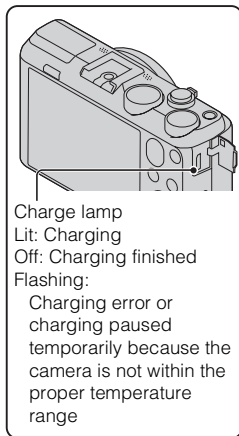
- While pressing the battery eject lever, insert the battery pack as illustrated. Make sure that the battery eject lever locks after insertion.
 - Closing the cover with the battery inserted incorrectly may damage the camera.
-

Charging the battery pack

**For customers in the USA
and Canada**



**For customers in countries/regions
other than the USA and Canada**



- 1 Connect the camera to the AC Adaptor (supplied), using the micro USB cable (supplied).
- 2 Connect the AC Adaptor to the wall outlet (wall socket). The Charge lamp lights orange, and charging starts.
 - Turn off the camera while charging the battery.
 - You can charge the battery pack even when it is partially charged.
 - When the Charge lamp flashes and charging is not finished, remove and re-insert the battery pack.

Notes

- If the Charge lamp on the camera flashes when the AC Adaptor is connected to the wall outlet(wall socket), this indicates that charging is temporarily stopped because the temperature is outside the recommended range. When the temperature gets back within the appropriate range, the charging resumes. We recommend charging the battery pack in an ambient temperature of between 10°C to 30°C (50°F to 86°F).
- The battery pack may not be effectively charged if the terminal section of the battery is dirty. In this case, wipe any dust off lightly using a soft cloth or a cotton swab to clean the terminal section of the battery.
- Connect the AC Adaptor (supplied) to the nearest wall outlet(wall socket). If any malfunctions occur while using the AC Adaptor, disconnect the plug from the wall outlet(wall socket) immediately to disconnect the power source.
- When charging is finished, disconnect the AC Adaptor from the wall outlet(wall socket).
- Be sure to use only genuine Sony brand battery packs, micro USB cable (supplied) and AC Adaptor (supplied).

■ Charging time (Full charge)

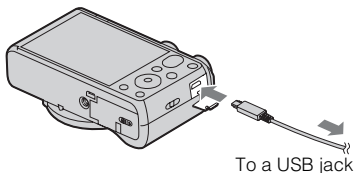
The charging time is approximately 230 min. using the AC Adaptor (supplied).

Notes

- The above charging time applies when charging a fully depleted battery pack at a temperature of 25°C (77°F). Charging may take longer depending on conditions of use and circumstances.

■ Charging by connecting to a computer

The battery pack can be charged by connecting the camera to a computer using a micro USB cable.



Notes

- Note the following points when charging via a computer:
 - If the camera is connected to a laptop computer that is not connected to a power source, the laptop battery level decreases. Do not charge for an extended period of time.
 - Do not turn on/off or restart the computer, or wake the computer to resume from sleep mode when a USB connection has been established between the computer and the camera. The camera may cause a malfunction. Before turning on/off, or restarting the computer or waking the computer from sleep mode, disconnect the camera and the computer.
 - No guarantees are made for charging using a custom-built computer or a modified computer.

■ Battery life and number of images you can record and view

	Battery life	Number of images
Shooting (still images)	Approx. 200 min.	Approx. 400 images
Typical movie shooting	Approx. 55min.	–
Continuous movie shooting	Approx. 90 min.	–
Viewing (still images)	Approx. 320 min.	Approx. 6400 images

Notes

- The above number of images applies when the battery pack is fully charged. The number of images may decrease depending on the conditions of use.
- The number of images that can be recorded is for shooting under the following conditions:
 - Using Sony “Memory Stick PRO Duo” (Mark2) media (sold separately)
 - The battery pack is used at an ambient temperature of 25°C (77°F).
 - [GPS setting] is set to [Off] (DSC-HX50V only).
 - [Disp. Resolution] is set to [Standard].
- The number for “Shooting still images” is based on the CIPA standard, and is for shooting under the following conditions:
(CIPA: Camera & Imaging Products Association)
 - DISP (Display Setting) is set to [ON].
 - Shooting once every 30 seconds.
 - The zoom is switched alternately between the W and T ends.
 - The flash strobes once every two times.
 - The power turns on and off once every ten times.

- The numbers of minutes for movie shooting are based on the CIPA standard, and are for shooting under the following conditions:
 - Movie quality: AVC HD HQ
 - Typical movie shooting: Battery life based on repeatedly starting/stopping shooting, zooming, turning on/off, etc.
 - Continuous movie shooting: Battery life based on non-stop shooting until the limit (29 minutes) has been reached, and then continued by pressing the MOVIE button again. Other functions, such as zooming, are not operated.

■ Supplying power

The camera can be supplied with power from the wall outlet(wall socket) by connecting to the AC Adaptor, using the micro USB cable (supplied).

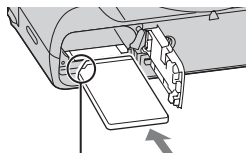
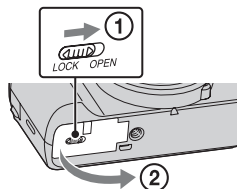
You can import images to a computer without worrying about draining the battery pack by connecting the camera to a computer using the micro USB cable.

In addition, you can use the AC Adaptor AC-UD10 (sold separately) or AC-UD11 (sold separately) for shooting to supply power when shooting.

Notes

- Power cannot be supplied when the battery pack is not inserted in the camera.
- Shooting is not possible when the camera is connected directly to a computer or to a power outlet using the supplied AC Adaptor.
- If you connect the camera and a computer using the micro USB cable while the camera is in playback mode, the display on the camera will change from the playback screen to the USB connection screen. Press  (Playback) button to switch to the playback screen.
- The AC Adaptor AC-UD11 (sold separately) may not be available in some countries/regions.

Inserting a memory card (sold separately)



Ensure the notched corner faces correctly.

1 Open the cover.

2 Insert the memory card (sold separately).

- With the notched corner facing as illustrated, insert the memory card until it clicks into place.

3 Close the cover.

■ Memory cards that you can use

	Memory card	For still images	For movies
A	Memory Stick XC-HG Duo	✓	✓
B	Memory Stick PRO Duo	✓	✓ (Mark2 only)
	Memory Stick PRO-HG Duo	✓	✓
C	Memory Stick Micro (M2)	✓	✓ (Mark2 only)
D	SD memory card	✓	✓ (Class 4 or faster)
	SDHC memory card	✓	✓ (Class 4 or faster)
	SDXC memory card	✓	✓ (Class 4 or faster)
E	microSD memory card	✓	✓ (Class 4 or faster)
	microSDHC memory card	✓	✓ (Class 4 or faster)
	microSDXC memory card	✓	✓ (Class 4 or faster)

- In this manual, the products in the table are collectively referred to as follows:

A: “Memory Stick XC Duo” media

B: “Memory Stick PRO Duo” media

C: “Memory Stick Micro” media

D: SD card

E: microSD memory card

Notes

- To use a “Memory Stick Micro” media or microSD memory card with the camera, be sure to insert it into a dedicated adaptor first.

■ To remove the memory card/battery pack

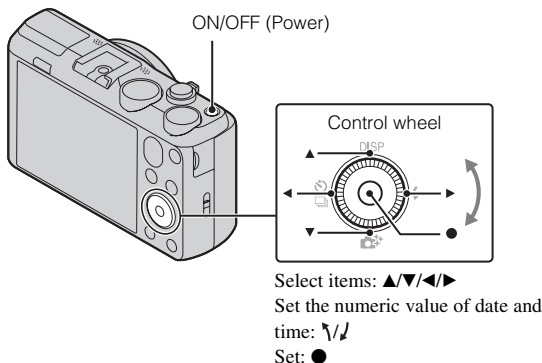
Memory card: Push the memory card in once to eject the memory card.

Battery pack: Slide the battery eject lever. Be sure not to drop the battery pack.

Notes

- Never remove the memory card/battery pack when the access lamp (page 9) is lit. This may cause damage to data in the memory card/internal memory.

Setting the clock

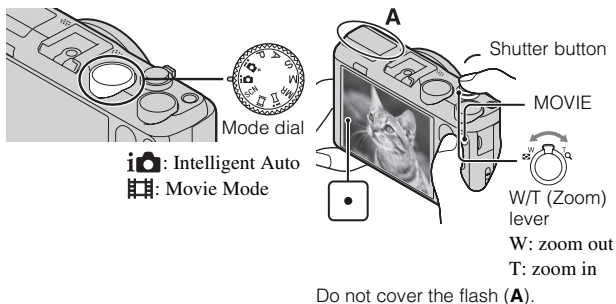


- 1 Press the ON/OFF (Power) button.**

Date & Time setting is displayed when you turn on the camera for the first time.

 - It may take time for the power to turn on and allow operation.
- 2 Select a desired language.**
- 3 Select a desired geographic location by following the on-screen instructions, then press ●.**
- 4 Set [Date & Time Format], [Daylight Savings] or [Summer Time] and [Date & Time], then select [OK] → [OK].**
 - Midnight is indicated as 12:00 AM, and noon as 12:00 PM.
- 5 Follow the instructions on the screen.**
 - The battery pack will run out quickly when:
 - [GPS setting] is set to [On] (DSC-HX50V only).
 - [Disp. Resolution] is set to [High].

Shooting still images/movies



Shooting still images

- 1 Press the shutter button halfway down to focus.
When the image is in focus, a beep sounds and the ● indicator lights.
- 2 Press the shutter button fully down to shoot an image.

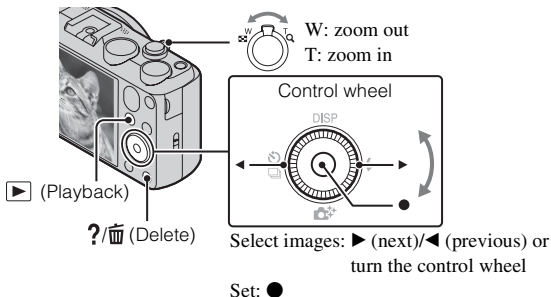
Shooting movies

- 1 Press the MOVIE (Movie) button to start recording.
 - Use the W/T (zoom) lever to change the zoom scale.
 - Press the shutter button to shoot still images while continuing to record the movie.
- 2 Press the MOVIE button again to stop recording.

Notes

- If you use the zoom function while shooting a movie, the sounds of the lens moving and the lever being operated will be recorded. The sound of the MOVIE button operating may also be recorded when movie recording is finished.
- The panoramic shooting range may be reduced, depending on the subject or the way it is shot. Therefore even when [360°] is set for panoramic shooting, the recorded image may be less than 360 degrees.
- Continuous shooting is possible for approximately 29 minutes at one time at the camera's default settings and when the temperature is approximately 25°C (77°F). When movie recording is finished, you can restart recording by pressing the MOVIE button again. Recording may stop to protect the camera depending on the ambient temperature.

Viewing images



1 Press the ► (Playback) button.

- When images on a memory card recorded with other cameras are played back on this camera, the registration screen for the data file appears.

■ Selecting next/previous image

Select an image by pressing ► (next)/◄ (previous) on the control wheel or by turning the control wheel. Press ● in the center of the control wheel to view movies.

■ Deleting an image

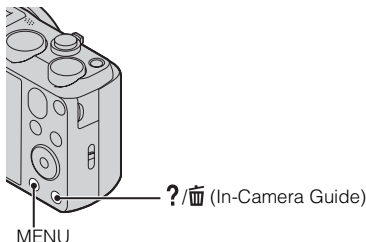
- ① Press **?/❏** (Delete) button.
- ② Select [This Image] with **▲** on the control wheel, then press **●**.

■ Returning to shooting images

Press the shutter button halfway down.

In-Camera Guide

This camera contains an internal function guide. This allows you to search the camera's functions according to your needs.



1 Press the MENU button.

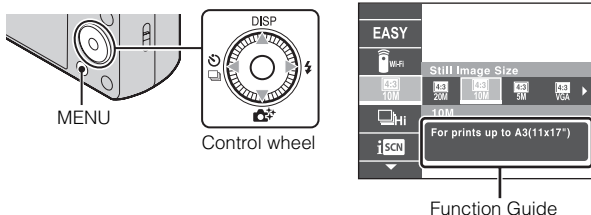
2 Select the desired MENU item, then press the **?/❏** (In-Camera Guide) button.

The operation guide for the selected item is displayed.

- If you press the **?/❏** (In-Camera Guide) button when the MENU screen is not displayed, you can search the guide using keywords or icons.
-

Introduction of other functions

Other functions used when shooting or playing back can be operated using the control wheel or MENU button on the camera. This camera is equipped with a Function Guide that allows you to easily select from the functions. While displaying the guide, try the other functions.



■ Control wheel

DISP (Display Setting): Allows you to change the screen display.

/ (Cont. Shooting/Self-Timer): Allows you to use the self-timer and burst shooting mode.

(Photo Creativity): Allows you to operate the camera intuitively.

(Flash): Allows you to select a flash mode for still images.

Center button (Tracking focus): The camera tracks the subject and adjusts focus automatically even when the subject is moving.

■ Menu Items

Shooting

Movie shooting scene	Select movie recording mode.
Panorama Shooting Scene	Select recording mode when shooting panoramic images.
Picture Effect	Shoot a still image with an original texture according to the desired effect.
Scene Selection	Select pre-set settings to match various scene conditions.
Memory recall mode	Select a setting you want to recall when the mode dial is set to [Memory recall mode].
Easy Mode	Shoot still images using minimal functions.
Defocus Effect	Set the level of background defocus effect when shooting in Background Defocus mode.
Ctrl with Smartphone	Shoot still images and movies by controlling the camera remotely by a smartphone.
Send to Computer*1	Back up images by transferring them to a computer connected to a network.
Still Image Size (Dual Rec)	Set the still image size shot while recording a movie.
Still Image Size/ Panorama Image Size/Movie Quality/ Movie Size	Select the image size and the quality for still images, panoramic images or movie files.
HDR Painting effect	When [HDR Painting] is selected in Picture Effect, set the effect level.
Area of emphasis	When [Miniature] is selected in Picture Effect, set the part to focus on.
Color hue	When [Toy camera] is selected in Picture Effect, set the color hue.
Extracted Color	When [Partial Color] is selected in Picture Effect, select the color to extract.
Illustration Effect	When [Illustration] is selected in Picture Effect, set the effect level.

ISO	Adjust the luminous sensitivity.
White Balance	Adjust color tones of an image.
White Balance Shift	Adjust color tones according to the adjusted value set based on the selected White Balance tone.
Focus	Select the focus method.
Metering Mode	Select the metering mode that sets which part of the subject to measure to determine the exposure.
Cont. Shooting Interval	Select the number of images taken per second for Burst shooting.
Bracket Setting	Set the type of the bracket shooting.
Scene Recognition	Set to automatically detect shooting conditions.
Soft Skin Effect	Set the Soft Skin Effect and the effect level.
Smile Shutter	Set to automatically release the shutter when a smile is detected.
Smile Detection Sensitivity	Set the Smile Shutter function sensitivity for detecting smiles.
Face Detection	Select to detect faces and adjust various settings automatically.
Color Mode	Select the vividness of the image, accompanied by effects.
Color Saturation	Adjust the vividness of the image.
Contrast	Adjust the contrast of the image.
Sharpness	Adjust the sharpness of the image.
Noise Reduction	Adjust the image resolution and the noise balance.
Anti Blink	Set to automatically shoot two images and select image in which the eyes are not blinking.
Movie SteadyShot	Set the strength of SteadyShot in Movie Mode. If you change the setting for [Movie SteadyShot], the angle of view will change.
Position Information*2	Check the GPS triangulating status and update the position information.
GPS Log REC*2	Record the route taken while carrying the camera.

Register Setting	Register the desired modes or camera settings. Set the mode dial to MR (Memory recall mode) to retrieve the registered settings.
In-Camera Guide	Search the camera's functions according to your needs.

*1 Displayed only when a memory card is inserted.

*2 DSC-HX50V only

Viewing

Send to Smartphone	Upload and transfer images to a smartphone.
View on TV	View images on a network-enabled TV.
Send to Computer*	Back up images by transferring them to a computer connected to a network.
Retouch	Retouch an image using various effects.
Picture Effect	Add various texture on images.
Slideshow	Select a method of continuous playback.
Delete	Delete an image.
3D Viewing	Set to play back images shot in 3D mode on a 3D TV.
View Mode*	Select the display format for images.
Display Cont. Shooting Group	Select to display burst images in groups or display all images during playback.
Protect	Protect the images.
Print (DPOF)*	Add a print order mark to a still image.
Rotate	Rotate a still image to the left or right.
In-Camera Guide	Search the camera's functions according to your needs.

* Displayed only when a memory card is inserted.

Setting items

If you press the MENU button while shooting or during playback,  (Settings) is provided as a final selection. You can change the default settings on the  (Settings) screen.

 Shooting Settings	Movie format/AF Illuminator/Grid Line/Clear Image Zoom/Digital Zoom/Wind Noise Reduct./Micref Level/Red Eye Reduction/Blink Alert/Write Date/Expanded Focus/Custom Button/Disp. Resolution
 Main Settings	Beep/Panel Brightness/Language Setting/Display color/Demo Mode/Initialize/Function Guide/HDMI Resolution/CTRL FOR HDMI/USB Connect Setting/USB Power Supply/LUN Setting/Download Music/Empty Music/Airplane Mode/GPS setting ^{*3} /GPS assist data ^{*3} /Dlt.GPS Log Data ^{*3} /Eye-Fi ^{*1} /Power Save/Version
 Network Settings	WPS Push/Access point settings/Edit Device Name/SSID/PW Reset/Disp MAC Address
 Memory Card Tool ^{*2}	Format/Create REC.Folder/Change REC.Folder/Delete REC.Folder/Copy/File Number
 Clock Settings	Area Setting/Date & Time Setting/Auto Clock ADJ ^{*3} /Auto Area ADJ ^{*3}

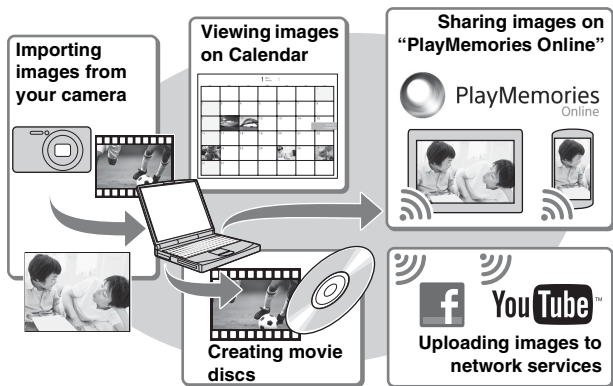
*1 Displayed only when an Eye-Fi memory card is inserted.

*2 If a memory card is not inserted,  (Internal Memory Tool) will be displayed and only [Format] can be selected.

*3 DSC-HX50V only

Features of “PlayMemories Home”

The software “PlayMemories Home” allows you to import still images and movies to your computer and use them. “PlayMemories Home” is required for importing AVCHD movies to your computer.



Downloading “PlayMemories Home” (for Windows only)

You can download “PlayMemories Home” from the following URL:
www.sony.net/pm

Notes

- An Internet connection is required to install “PlayMemories Home”.
- An Internet connection is required to use “PlayMemories Online” or other network services. “PlayMemories Online” or other network services may not be available in some countries or regions.
- “PlayMemories Home” is not compatible with Macs. Use the applications that are installed on your Mac. For details, visit the following URL:
<http://www.sony.co.jp/imsoft/Mac/>

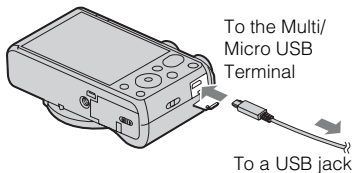
■ Installing “PlayMemories Home” on a computer

- 1 Using the Internet browser on your computer, go to the following URL, then click [Install] → [Run].

www.sony.net/pm

- 2 Follow the instructions on the screen to complete the installation.

- When the message to connect the camera to a computer is displayed, connect the camera and computer using the micro USB cable (supplied).



■ Viewing “PlayMemories Home Help Guide”

For details on how to use “PlayMemories Home”, refer to the “PlayMemories Home Help Guide”.

- 1 Double-click the [PlayMemories Home Help Guide] icon on the desktop.

- To access the “PlayMemories Home Help Guide” from the start menu: Click [Start] → [All Programs] → [PlayMemories Home] → [PlayMemories Home Help Guide].
 - For Windows 8, select the [PlayMemories Home] icon from the Start screen to start [PlayMemories Home], then select [PlayMemories Home Help Guide] from [Help] menu.
 - For details on “PlayMemories Home”, you can also see the “Cyber-shot User Guide” (page 2) or the following PlayMemories Home support page (English only):
<http://www.sony.co.jp/pmh-se/>
-

Number of still images and recordable time of movies

The number of still images and recordable time may vary depending on the shooting conditions and the memory card.

Still images

(Units: Images)

Size \ Capacity	Internal memory	Memory card
	Approx. 48 MB	2 GB
20M	7	295
VGA	155	6400
16:9(15M)	8	325

Movies

The table below shows the approximate maximum recording times. These are the total times for all movie files. Continuous shooting is possible for approximately 29 minutes (a product specification limit). The maximum continuous recording time of an MP4 (12M) format movie is about 15 minutes (limited by the 2 GB file size restriction).

(h (hour), m (minute))

Size \ Capacity	Internal memory	Memory card
	Approx. 48 MB	2 GB
AVC HD 28M (PS)	—	8 m (8 m)
AVC HD 24M (FX)	—	10 m (10 m)
AVC HD 9M (HQ)	—	25 m (15 m)
MP4 12M	—	15 m
MP4 3M	—	1 h 10 m

The number in () is the minimum recordable time.

- The recordable time of movies varies because the camera is equipped with VBR (Variable Bit Rate), which automatically adjusts image quality depending on the shooting scene. When you record a fast-moving subject, the image is clearer but the recordable time is shorter because more memory is required for recording.

The recordable time also varies depending on the shooting conditions, the subject or the image quality/size settings.

Notes on using the camera

Functions built into this camera

- This manual describes each of the functions of 1080 60i-compatible devices and 1080 50i-compatible devices.
 - To determine whether your camera supports the GPS function, check the model name of your camera.
GPS-compatible: DSC-HX50V
GPS-incompatible: DSC-HX50
 - To check if your camera is a 1080 60i-compatible device or 1080 50i-compatible device, check for the following marks on the bottom of the camera.
1080 60i-compatible device: 60i
1080 50i-compatible device: 50i
- This camera is compatible with 1080 60p or 50p-format movies. Unlike standard recording modes up to now, which record in an interlacing method, this camera records using a progressive method. This increases the resolution, and provides a smoother, more realistic image.
- While abroad an airplane, set [Airplane Mode] to [On] (DSC-HX50V only).
- Do not watch 3D images shot with this camera for extended periods of time on 3D-compatible monitors.
- When you view 3D images shot with this camera on a 3D-compatible monitor, you may experience discomfort in the form of eye strain, fatigue, or nausea. To prevent these symptoms, we recommend that you take regular breaks. However, you need to determine for yourself the length and frequency of breaks you require, as they vary according to the individual. If you experience any type of discomfort, stop viewing the 3D images until you feel better, and consult a physician as necessary. Also refer to the operating instructions supplied with the device or software you have connected or are using with this camera. Note that a child's eyesight is still at the development stage (particularly children below the age of 6). Consult a pediatrician or ophthalmologist before letting your child view 3D images, and make sure he/she observes the above precautions when viewing such images.

On GPS-compatible devices (DSC-HX50V only)

- Use GPS in accordance with regulations of countries and regions where you use it.
- If you do not record the location information, set [GPS setting] to [Off].

On use and care

Avoid rough handling, disassembling, modifying, physical shock, or impact such as hammering, dropping, or stepping on the product. Be particularly careful of the lens.

Notes on recording/playback

- Before you start recording, make a trial recording to make sure that the camera is working correctly.
- The camera is neither dust-proof, nor splash-proof, nor water-proof.
- Avoid exposing the camera to water. If water enters inside the camera, a malfunction may occur. In some cases, the camera cannot be repaired.
- Do not aim the camera at the sun or other bright light. It may cause the malfunction of the camera.
- If moisture condensation occurs, remove it before using the camera.
- Do not shake or strike the camera. It may cause a malfunction and you may not be able to record images. Furthermore, the recording media may become unusable or image data may be damaged.

Do not use/store the camera in the following places

- In an extremely hot, cold or humid place
In places such as in a car parked in the sun, the camera body may become deformed and this may cause a malfunction.
- Under direct sunlight or near a heater
The camera body may become discolored or deformed, and this may cause a malfunction.
- In a location subject to rocking vibration
- Near a location that generates strong radio waves, emits radiation or is strongly magnetic place. Otherwise, the camera may not properly record or play back images.
- In sandy or dusty places
Be careful not to let sand or dust get into the camera. This may cause the camera to malfunction, and in some cases this malfunction cannot be repaired.

Notes on the screen and lens

The screen is manufactured using extremely high-precision technology so over 99.99% of the pixels are operational for effective use. However, some tiny black and/or bright dots (white, red, blue or green) may appear on the screen. These dots are a normal result of the manufacturing process, and do not affect the recording.

On camera's temperature

Your camera and battery may get hot due to continuous use, but it is not a malfunction.

On the overheat protection

Depending on the camera and battery temperature, you may be unable to record movies or the power may turn off automatically to protect the camera.

A message will be displayed on the screen before the power turns off or you can no longer record movies. In this case, leave the power off and wait until the camera and battery temperature goes down. If you turn on the power without letting the camera and battery cool enough, the power may turn off again or you may be unable to record movies.

On charging the battery

If you charge a battery that has not been used for a long time, you may be unable to charge it to the proper capacity.

This is due to the battery characteristics, and is not a malfunction. Charge the battery again.

Warning on copyright

Television programs, films, videotapes, and other materials may be copyrighted.

Unauthorized recording of such materials may be contrary to the provisions of the copyright laws.

No compensation for damaged content or recording failure

Sony cannot compensate for failure to record or loss or damage of recorded content due to a malfunction of the camera or recording media, etc.

Cleaning the camera surface

Clean the camera surface with a soft cloth slightly moistened with water, then wipe the surface with a dry cloth. To prevent damage to the finish or casing:

- Do not expose the camera to chemical products such as thinner, benzine, alcohol, disposable cloths, insect repellent, sunscreen or insecticide.

Maintaining the screen

- Hand cream or moisturizer left on the screen may dissolve its coating. If you get any on the screen, wipe it off immediately.
- Wiping forcefully with tissue paper or other materials can damage the coating.
- If fingerprints or debris are stuck to the screen, we recommend that you gently remove any debris and then wipe the screen clean with a soft cloth.

Note on wireless LAN

We assume no responsibility whatsoever for any damage caused by unauthorized access to, or unauthorized use of, destinations loaded on the camera, resulting from loss or theft.

Note on disposal/transfer of the camera

To protect personal data, perform the following when disposing of or transferring the camera.

- Format the internal memory (page 26), record images up to full capacity of the internal memory with the lens covered, and then format the internal memory again.

This will make it difficult to recover any of your original data.

- Reset all camera settings by performing [Initialize] → [All settings] (page 26).

Specifications

Camera

[System]

Image device: 7.82 mm (1/2.3 type)

Exmor R CMOS sensor

Total pixel number of camera:

Approx. 21.1 Megapixels

Effective pixel number of camera:

Approx. 20.4 Megapixels

Lens: Sony G 30x zoom lens

f = 4.3 mm – 129 mm (24 mm –
720 mm (35 mm film equivalent))

F3.5 (W) – F6.3 (T)

While shooting movies (16:9):

26.5 mm – 795 mm*

While shooting movies (4:3):

32.5 mm – 975 mm*

* When [Movie SteadyShot] is set
to [Standard]

SteadyShot: Optical

Exposure control: Automatic exposure,

Shutter speed priority, Aperture
priority, Manual exposure, Scene
Selection

White balance: Automatic, Daylight,

Cloudy, Fluorescent 1/2/3,
Incandescent, Flash, One Push,
White Balance Shift

File format:

Still images: JPEG (DCF, Exif,
MPF Baseline) compliant, DPOF
compatible

3D still images: MPO (MPF
Extended (Disparity Image))
compliant

Movies (AVCHD format):

AVCHD format Ver.2.0

compatible

Video: MPEG-4 AVC/H.264

Audio: Dolby Digital 2ch,
equipped with Dolby Digital Stereo
Creator

- Manufactured under license from
Dolby Laboratories.

Movies (MP4 format):

Video: MPEG-4 AVC/H.264

Audio: MPEG-4 AAC-LC 2ch

Recording media: Internal Memory
(Approx. 48 MB), “Memory Stick
XC Duo” media, “Memory Stick
PRO Duo” media, “Memory Stick
Micro” media, SD cards, microSD
memory cards

Flash: Flash range (ISO sensitivity
(Recommended Exposure Index)
set to Auto):

Approx. 0.25 m to 5.6 m
(0.82 ft. to 18.37 ft.) (W)/

Approx. 2.0 m to 3.0 m
(6.56 ft. to 9.84 ft.) (T)

[Input and Output connectors]

HDMI connector: HDMI micro jack

Multi/Micro USB Terminal*:

USB communication

USB communication: Hi-Speed USB
(USB 2.0)

* Supports Micro USB compatible
device.

[LCD screen]

LCD panel: 7.5 cm (3.0 type) TFT
drive

Total number of dots: 921 600 dots

[Power, general]

Power: Rechargeable battery pack

NP-BX1, 3.6 V

AC Adaptor AC-UB10/UB10B/
UB10C/UB10D, 5 V

Power consumption (during shooting):
Approx. 1.2 W

Operating temperature: 0 °C to 40 °C
(32 °F to 104 °F)

Storage temperature: -20 °C to +60 °C
(-4 °F to +140 °F)

Dimensions (CIPA compliant):
108.1 mm × 63.6 mm × 38.3 mm
(4 3/8 inches × 2 5/8 inches ×
1 9/16 inches)
(W/H/D)

Mass (CIPA compliant) (including
NP-BX1 battery pack, "Memory
Stick PRO Duo" media):
Approx. 272 g (9.6 oz)

Microphone: Stereo

Speaker: Monaural

Exif Print: Compatible

PRINT Image Matching III:
Compatible

[Wireless LAN]

Supported standard: IEEE 802.11 b/g/n

Frequency: 2.4GHz

Supported security protocols: WEP/
WPA-PSK/WPA2-PSK

Configuration method: WPS (Wi-Fi
Protected Setup) / manual

Access method: Infrastructure Mode

AC Adaptor AC-UB10/UB10B/ UB10C/UB10D

Power requirements: AC 100 V to
240 V, 50 Hz/60 Hz, 70 mA

Output voltage: DC 5 V, 0.5 A

Operating temperature: 0 °C to 40 °C
(32 °F to 104 °F)

Storage temperature: -20 °C to +60 °C
(-4 °F to +140 °F)

Dimensions:

Approx. 50 mm × 22 mm × 54 mm
(2 inches × 7/8 inches × 2 1/4
inches) (W/H/D)

Mass:

For the USA and Canada: Approx.
48 g (1.7 oz)

For countries or regions other than
the USA and Canada: Approx. 43 g
(1.5 oz)

Rechargeable battery pack NP-BX1

Used battery: Lithium-ion battery

Maximum voltage: DC 4.2 V

Nominal voltage: DC 3.6 V

Maximum charge voltage: DC 4.2 V

Maximum charge current: 1.89 A

Capacity: 4.5 Wh (1 240 mAh)

Design and specifications are subject to
change without notice.

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- Add further enjoyment with your PlayStation 3 by downloading the application for PlayStation 3 from PlayStation Store (where available.)
- The application for PlayStation 3 requires PlayStation Network account and application download. Accessible in areas where the PlayStation Store is available.

Additional information on this product and answers to frequently asked questions can be found at our Customer Support Website.

<http://www.sony.net/>

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<http://www.sony.net/SonyInfo/Support/>

